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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,788	12/30/2003	Kil-Ho Jeong	51876P568	1090

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EXAMINER

VUONG, QUOCHIEN B

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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07/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/749,788	Applicant(s) JEONG ET AL.	
	Examiner Quochien B. Vuong	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's response filed on 03/31/2008. Claims 1-9 are now pending in the present application. **This action is made final.**

Claim Objections

1. Claim 9 is objected to because of the following informalities: "strobe" on lines 2 and 3 should be "strobo". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Aotake et al. (US 6,819,942).

Regarding claim 1, Aotake et al. (figures 1, 2, and 4) disclose an apparatus for automatically detecting the presence of an external unit (flash unit (FU) or earphone unit (EU)) in an earphone jack port (25) of a mobile terminal (MU), the apparatus comprising: connection unit (25) for electrically connecting an earphone/microphone set

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or the external device to the mobile terminal and generating level information if one of an earphone/microphone set or the external device is connected to the mobile terminal; sensor (27 and 28) for determining whether the earphone/microphone set or the external device is electrically connected to the connection unit according to the level information and generating an indication signal containing a determination result (column 5, line 58 – column 6, line 15); main processor (20) for generating a control signal to control the earphone/microphone set or the external device according the indication signal; and external device controller for controlling the external device by receiving the control signal from the main processor, wherein the external device controller enables the connected external device automatically, when the external device is connected to the connection unit (column 2, line 55 – column 5, line 52)

As to claim 2, Aotake et al. disclose the apparatus further comprising call controller for generating a call signal indicating whether or not the mobile terminal is used for originating a call; and earphone/microphone set controller for controlling an earphone/microphone to pass voice signal to a voice input/output unit in the mobile terminal according to the level information and the call signal (column 5, lines 44-52; and column 6, line 34 – column 7, line 17).

As to claim 3, Aotake et al. disclose wherein the main processor generates the control signal to enable the external controller if the indication signal represents that the external device is connected to the connection unit and generating a shot signal and a charge control signal (column 4, lines 40-67).

As to claim 4, Aotake et al. disclose wherein the external device controller controls the external device according to the shot signal and the charge control signal from the main processor (column 4, lines 40-67).

As to claim 5, Aotake et al. disclose wherein the main processor generates the control signal to enable the earphone/microphone set controller if the indication signal represents that the earphone/microphone set is connected to the connection unit (column 6, lines 35-64).

As to claim 6, Aotake et al. disclose wherein the connection unit generates the level information having a voltage level and the sensor generates the indication signal by analyzing the voltage level in the level information (column 5, lines 12-43).

Regarding claim 8, Aotake et al. (figures 1-2 and 4) disclose a method for automatically detecting the presence of an external device (FU or EU) in an earphone jack port (25) of a mobile terminal (MU), the method comprising the steps of: a) obtaining level information from a connection unit, wherein the level information has different level value according to a connected external device (column 5, lines 12-43); b) determining what external device is electrically connected to the connection unit according to the level information (column 5, lines 12-43; column 7, lines 26-39); c) enabling an external device control unit if the external device is electrically connected to the connection unit as a determination result of step b) (column 7, lines 40-67); and d) enabling the earphone/microphone set control unit if the earphone/microphone set is electrically connected to the connection unit as a determination result of step b) (column 5, lines 44-52; column 6, lines 44-64).

As to claim 9, Aotake et al. disclose wherein the external device is a strobo, wherein the external device controller enables the connected trobo automatically, when the trobo is connected to the connection unit and a digital camera is used (column 4, lines 40-67, and column 7, lines 40-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aotake et al.

Regarding claim 7, Aotake et al. disclose the apparatus of claim 1 above; in addition, it would have been obvious for the apparatus of Aotake et al. including wherein the connection unit includes: a microphone/charge-control signal end for providing a connection to both the microphone end of the earphone/microphone set plug and the charge-control signal end of an external plug; a speaker/shot end for providing a connection to both the speaker end of the earphone/microphone set plug and the shot end of the external plug; a switch end for making known which of the following, the earphone/microphone set or the external device, is electrically connected to the earphone-microphone set/external device connection unit while the earphone-microphone set/external device connection unit is physically connected to the

speaker/shot end; and a ground end for providing a connection to the ground end of the earphone/microphone set plug as well as the ground end of the external unit plug since the arrangement is just a system design preference performing the same function of detecting the present of the earphone/microphone set or the external device connection to the mobile terminal (see column 4, line 57 – column 5, line 52; and column 6, line 34 – column 7, line 67).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quochien B Vuong/
Primary Examiner, Art Unit 2618